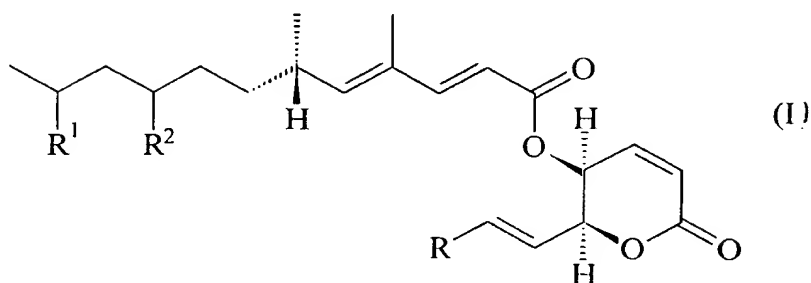


CLAIMS

1. A 5,6-dihydro- α -pyrone of formula (I)

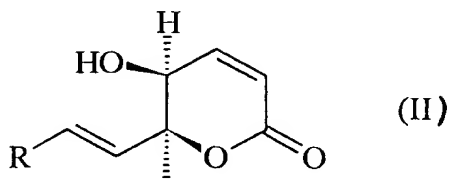


wherein R is CO₂H or CH₃ and each of R¹ and R² is H; or R is CO₂H, one of R¹ and R² is H and the other is OH; or, when R is CO₂H, a pharmaceutically or veterinarily acceptable salt thereof.

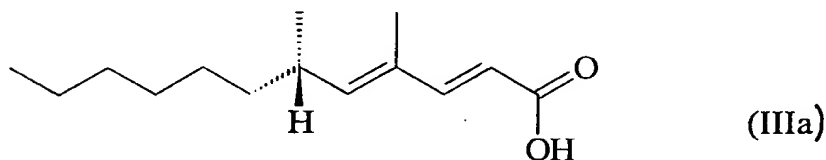
2. A process for the preparation of a 5,6-dihydro- α -pyrone of formula (I) as defined in claim 1 or a pharmaceutically or veterinarily acceptable salt thereof, which process comprises:

- (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Phomopsis* sp. 22502 (CBS 313.96) or a mutant thereof which produces a said 5,6-dihydro- α -pyrone;
- (ii) isolating a said 5,6-dihydro- α -pyrone from the fermentation broth; and
- (iii) if desired when the isolated said 5,6-dihydro- α -pyrone is the compound of formula (I) wherein R is CO₂H, converting the said 5,6-dihydro- α -pyrone into a pharmaceutically or veterinarily acceptable salt thereof.

3. A process for the preparation of a 5,6-dihydro- α -pyrone of formula (I), as defined in claim 1, wherein R is CH₃, which process comprises esterifying the phomalactone of formula (II):



10 with a fatty acid of formula (IIIa):



20 4. A pharmaceutical or veterinary composition comprising a pharmaceutically or veterinarily acceptable carrier or diluent and, as active ingredient, a compound as claimed in claim 1.

25 5. A compound according to claim 1 for use in a method of treatment of the human or animal body by therapy.

6. A compound according to claim 5 for use as a cytokine production inhibitor.

7. A compound according to claim 6 for use as an IL-1 production inhibitor.

8. A compound according to claim 6 for use in the

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treatment of an immunoinflammatory condition.

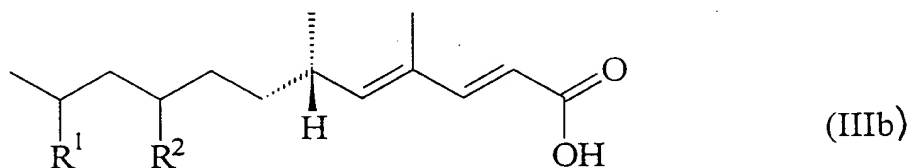
9. A compound according to claim 8 for use in the treatment of rheumatoid arthritis, osteoarthritis, septic shock, psoriasis, atherosclerosis, inflammatory bowel disease, 5 Crohn's disease or asthma.

10. A compound according to claim 6 for use in the treatment of a central nervous system disorder.

11. A process for the preparation of the phomalactone of formula (II) defined in claim 3, which process comprises:

- 10 (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof which produces the said phomalactone; and
- 15 (ii) isolating the said phomalactone from the fermentation broth.

12. A fatty acid of formula (IIIb):



wherein one of R^1 and R^2 is H and the other is ~~H or~~ OH.

25 13. A process for the preparation of a fatty acid of formula (III):

treatment of an immunoinflammatory condition.

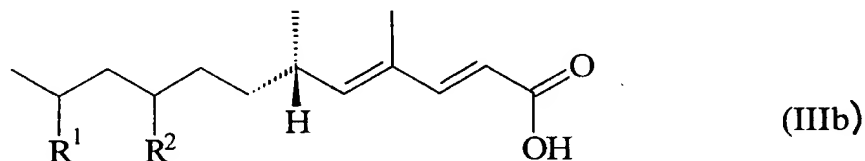
9. A compound according to claim 8 for use in the treatment of rheumatoid arthritis, osteoarthritis, septic shock, psoriasis, atherosclerosis, inflammatory bowel disease, Crohn's disease or asthma.

10. A compound according to claim 6 for use in the treatment of a central nervous system disorder.

11. A process for the preparation of the phomalactone of formula (II) defined in claim 3, which process comprises:

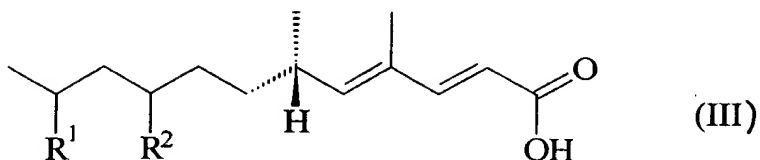
- 10 (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof which produces the said phomalactone; and
- (ii) isolating the said phomalactone from the fermentation broth.

12. A fatty acid of formula (IIIb):



wherein one of R^1 and R^2 is H and the other is H or OH.

13. A process for the preparation of a fatty acid of formula (III):



5

wherein one of R^1 and R^2 is H and the other is H or OH.

which process comprises:

- (i) fermenting, in a source of carbon, nitrogen and inorganic salts, fungal strain *Phomopsis* sp. 22502 (CBS 313.96) or a mutant thereof which produces the said fatty acid; and
- (ii) isolating the said fatty acid from the fermentation broth.

10

14. A biologically pure culture of fungal strain *Phomopsis* sp. 22502 (CBS 313.96) or a mutant thereof which produces a 5,6-dihydro- α -pyrone of formula (I) as defined in claim 1 ~~or a fatty acid of formula (III) as defined in claim~~

15

15. A biologically pure culture of fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof which produces a phomalactone as defined in claim 3.

20

16. A process for fermenting fungal strain *Phomopsis* sp. 22502 (CBS 313.96) or a mutant thereof as defined in claim 13, which process comprises fermenting strain *Phomopsis* sp. 22502 (CBS 313.96) or a said mutant thereof in a source of carbon, nitrogen and inorganic salts.

25

17. A process for fermenting fungal strain *Paecilomyces* sp. 3527 (CBS 314.96) or a mutant thereof as defined in claim 14, which process comprises fermenting strain *Paecilomyces* sp.

3527 (CBS 314.96) or a said mutant thereof in a source of carbon, nitrogen and inorganic salts.

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Year	Country	Population (millions)	Urban population (millions)	Urban population (%)	Population density (per sq km)	Urban population density (per sq km)
1980	China	954	200	21	120	1,200
1980	India	684	100	15	150	1,500
1980	USA	226	140	62	30	3,000
1980	Japan	123	80	65	330	3,300
1980	USSR	246	100	41	8	800
1980	France	56	35	63	100	1,000
1980	Germany	41	25	61	230	2,300
1980	Italy	58	35	60	280	2,800
1980	Spain	40	25	63	160	1,600
1980	UK	56	35	63	260	2,600
1980	Sweden	8.5	5.5	65	180	1,800
1980	Norway	4.5	2.5	56	15	150
1980	Denmark	5.0	3.0	60	130	1,300
1980	Netherlands	16.0	10.0	63	350	3,500
1980	Belgium	10.5	6.5	62	380	3,800
1980	Switzerland	7.0	4.0	57	170	1,700
1980	Austria	8.0	4.0	50	190	1,900
1980	Portugal	10.0	5.0	50	110	1,100
1980	Greece	11.0	5.0	45	90	900
1980	Spain	40.0	20.0	50	160	1,600
1980	Italy	58.0	30.0	52	280	2,800
1980	France	56.0	30.0	54	100	1,000
1980	Germany	41.0	20.0	49	230	2,300
1980	UK	56.0	30.0	54	260	2,600
1980	Sweden	8.5	4.0	47	180	1,800
1980	Norway	4.5	2.0	44	15	150
1980	Denmark	5.0	2.5	50	130	1,300
1980	Netherlands	16.0	8.0	50	350	3,500
1980	Belgium	10.5	5.0	48	380	3,800
1980	Switzerland	7.0	3.0	43	170	1,700
1980	Austria	8.0	3.0	38	190	1,900
1980	Portugal	10.0	4.0	40	110	1,100
1980	Greece	11.0	3.0	27	90	900
1980	Spain	40.0	10.0	25	160	1,600
1980	Italy	58.0	15.0	26	280	2,800
1980	France	56.0	10.0	18	100	1,000
1980	Germany	41.0	10.0	24	230	2,300
1980	UK	56.0	10.0	18	260	2,600
1980	Sweden	8.5	5.0	59	180	1,800
1980	Norway	4.5	2.0	44	15	150
1980	Denmark	5.0	2.5	50	130	1,300
1980	Netherlands	16.0	8.0	50	350	3,500
1980	Belgium	10.5	5.0	48	380	3,800
1980	Switzerland	7.0	3.0	43	170	1,700
1980	Austria	8.0	3.0	38	190	1,900
1980	Portugal	10.0	4.0	40	110	1,100
1980	Greece	11.0	3.0	27	90	900
1980	Spain	40.0	10.0	25	160	1,600
1980	Italy	58.0	15.0	26	280	2,800
1980	France	56.0	10.0	18	100	1,000
1980	Germany	41.0	10.0	24	230	2,300
1980	UK	56.0	10.0	18	260	2,600
1980	Sweden	8.5	5.0	59	180	1,800
1980	Norway	4.5	2.0	44	15	150
1980	Denmark	5.0	2.5	50	130	1,300
1980	Netherlands	16.0	8.0	50	350	3,500
1980	Belgium	10.5	5.0	48	380	